

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior listings and versions thereof.

Claims 1-14. (cancelled)

Claim 15. (currently amended) A device for introducing gas into a fluidized bed comprising:

at least one gas inlet pipe located underneath and/or above the fluidized bed,
wherein the gas inlet pipe has gas-swirling means at its mouth, the gas-swirling means comprising at least one bead.

Claim 16. (previously presented) A device of claim 15 wherein the gas-swirling means form at least one narrowing or widening of the pipe lumen.

Claim 17. (previously presented) A device of claim 16 wherein the narrowing has at least one edge.

Claim 18. (previously presented) A device of claim 15 wherein the gas-swirling means comprise a thread.

Claim 19. (cancelled)

Claim 20. (previously presented) A device of claim 15 wherein the gas-swirling means comprise at least one screen, at least one turbulence grid and/or at least one perforated diaphragm.

Claim 21. (previously presented) A device of claim 15 wherein the gas comprises ethene, oxygen and/or hydrogen chloride.

Claim 22. (previously presented) A fluidized reactor bed comprising a device of claim 15.

Claim 23. (currently amended) A process for the production of 1,2-dichloroethane with a fluidized bed reactor comprising a device for introducing gas, the method comprising:

introducing ethene, oxygen and/or hydrogen chloride into a fluidized bed comprising a catalyst,

wherein the device comprises at least one gas inlet pipe located underneath and/or above the fluidized bed and the gas inlet pipe has gas-swirling means at its mouth, the gas-swirling means comprising at least one bead.

Claim 24. (previously presented) The process of claim 23 wherein the gas inlet pipe is arranged underneath the fluidized bed and the gas current is discharged at an average discharge velocity in the range of from 0.5 to 10 m/s.

Claim 25. (previously presented) The process of claim 23 wherein the gas inlet pipe is arranged underneath the fluidized bed and the gas current is discharged at an average discharge velocity in the range of from 3 to 6 m/s.

Claim 26. (previously presented) The process of claim 23 wherein the gas inlet pipe is arranged above the fluidized bed and the gas current is discharged at an average discharge velocity in the range of from 0.7 to 10 m/s.

Claim 27. (previously presented) The process of claim 23 wherein the gas inlet pipe is arranged above the fluidized bed and the gas current is discharged at an average discharge velocity in the range of from 2 to 5 m/s.

Claim 28. (new) A device of claim 15 wherein the at least one bead has at least one edge.

Claim 29. (new) A device of claim 28 wherein the at least one edge is a sharp edge.

Claim 30. (new) A device of claim 15 wherein the at least one bead is an annular bead arranged at least part of an inner circumference of the gas inlet pipe.

Claim 31. (new) A device for introducing gas into a fluidized bed comprising:
at least one gas inlet pipe located underneath and/or above the fluidized bed,
wherein the gas inlet pipe has gas-swirling means at its mouth, the gas-swirling
means comprising at least one screen, at least one turbulence grid and/or at least one
perforated diaphragm.

Claim 32. (new) A device of claim 31 wherein the gas-swirling means form at
least one narrowing or widening of the pipe lumen.

Claim 33. (new) A device of claim 32 wherein the narrowing has at least one
edge.

Claim 34. (new) A device of claim 31 wherein the gas-swirling means comprise
a thread.

Claim 35. (new) A device of claim 31 wherein the gas-swirling means comprise
at least one bead.

Claim 36. (new) A device of claim 31 wherein the gas comprises ethene,
oxygen and/or hydrogen chloride.

Claim 37. (new) A fluidized reactor bed comprising a device of claim 31.

Claim 38. (new) A process for the production of 1,2-dichloroethane with a fluidized bed reactor comprising a device for introducing gas, the method comprising:

introducing ethene, oxygen and/or hydrogen chloride into a fluidized bed comprising a catalyst,

wherein the device comprises at least one gas inlet pipe located underneath and/or above the fluidized bed and the gas inlet pipe has gas-swirling means at its mouth, the gas-swirling means comprising at least one screen, at least one turbulence grid and/or at least one perforated diaphragm.

Claim 39. (new) The process of claim 38 wherein the gas inlet pipe is arranged underneath the fluidized bed and the gas current is discharged at an average discharge velocity in the range of from 0.5 to 10 m/s.

Claim 40. (new) The process of claim 38 wherein the gas inlet pipe is arranged underneath the fluidized bed and the gas current is discharged at an average discharge velocity in the range of from 3 to 6 m/s.

Claim 41. (new) The process of claim 38 wherein the gas inlet pipe is arranged above the fluidized bed and the gas current is discharged at an average discharge velocity in the range of from 0.7 to 10 m/s.

Claim 42. (new) The process of claim 38 wherein the gas inlet pipe is arranged above the fluidized bed and the gas current is discharged at an average discharge velocity in the range of from 2 to 5 m/s.